

(ii) identifying genes which are up- or down-regulated under the culture conditions.

8. (Amended) The method of claim 7, wherein the step of identifying genes which are up- or down-regulated includes differential display of mRNA from the [culture] <sup>immatured</sup> neural crest cells with mRNA from the [non-] smooth muscle cells.

12. (Amended) A method for identifying an agent that modulates [proliferation or migration of] differentiation of neural crest cells into smooth muscle cells, comprising:

- (i) identifying a gene product which is up- or down-regulated during differentiation of neural crest cells into smooth muscle cells;
- (ii) identifying an agent which inhibits or potentiates an activity of the gene product.

14. (Amended) A method for identifying an agent that [inhibits proliferation and/or migration of] modulates the differentiation of neural crest cells into smooth muscle cells, comprising:

- (i) identifying a gene product which is up- or down-regulated during differentiation of neural crest cells into smooth muscle cells, the gene product having a biological activity required for proliferation and/or migration of smooth muscle cells;
- (ii) identifying an agent which inhibits the biological activity of the gene product.

15. (Amended) A method for identifying an agent that modulates [proliferation and/or migration of] differentiation of neural crest cells into smooth muscle cells, comprising:

- (i) identifying an agent which alters the biological activity of a latent TGF $\beta$  binding protein (LTBP), and
- (ii) assessing the ability of the agent to modulate [proliferation and/or migration of] differentiation of neural crest cells into smooth muscle cells.

- b4
18. (Amended) A method for identifying an agent that modulates [proliferation and/or migration of] differentiation of neural crest cells into smooth muscle cells, comprising:
- (i) identifying an agent which inhibits the kinase activity of an integrin linked kinase, and
  - (ii) assessing the ability of the agent to modulate [proliferation and/or migration of] differentiation of neural crest cells into smooth muscle cells.
- b6
20. (Amended) A method for identifying an agent that modulates [proliferation and/or migration of] differentiation of neural crest cells into smooth muscle cells, comprising:
- (i) identifying an agent which [inhibits] modulates activation of a LEF-1/β-catenin signaling pathway, and
  - (ii) assessing the ability of the agent to modulate [proliferation and/or migration of] differentiation of neural crest cells into smooth muscle cells.
21. (Amended) The method of any of claims 10, 12, 14, 15, 18 or 20, comprising the further step of formulating a pharmaceutical preparation comprising one or more agents identified as able to modulate [proliferation and/or migration of] differentiation of neural crest cells into smooth muscle cells.

***Conclusion***

If a telephone conversation with Applicant's Agent would expedite prosecution of the above-identified application, the Examiner is urged to call the undersigned at (617) 832-1000.

Respectfully submitted,

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